WHAT IS CLAIMED IS:

1.   An automated manufacturing system, comprising

      a)   a computer processing system that defines product packages and one or more product subbatches within each product package in response to input product information; and

      b)   a plurality of consolidation systems that receive the product subbatches in accordance to consolidation assignment and consolidate the product subbatches into product packages, wherein the computer processing system receives the status information of the consolidation systems and produces consolidation assignment.

2   The automated manufacturing system of claim 1, further comprising:

      c)   a distribution system that receives the product subbatches and distributes the product subbatches to the consolidation systems in accordance to the consolidation assignment produced by the computer processing system.

3.   The automated manufacturing system of claim 1, further comprising

      c)   an output system that receives the product packages from the consolidation systems and ships the product packages.

4.   The automated manufacturing system of claim 1, wherein the product subbatches carries machine readable or human readable information comprising consolidation assignment information.

5.   The automated manufacturing system of claim 4, wherein the status of the consolidation systems are tracked by reading the machine readable or human readable information carried on the product subbatches.

6.   The automated manufacturing system of claim 1, wherein the status information of the consolidation systems include the load levels of the consolidation systems.

7. The automated manufacturing system of claim 6, wherein the computer processing system produces consolidation assignment in accordance to the load levels of the consolidation systems.

8. The automated manufacturing system of claim 1, wherein the status information of the consolidation systems includes the properties of the product subbatches stored in the consolidation systems.

9. The automated manufacturing system of claim 8, wherein the status information of the consolidation systems includes the properties of the companion product subbatches of the product subbatches stored in the consolidation systems.

10. The automated manufacturing system of claim 8, wherein the computer processing system produces consolidation assignment in accordance to the information about the product subbatches stored in the consolidation systems.

11. An automated manufacturing system, comprising
    a) a computer processing system that defines product packages and one or more product subbatches within each product package in response to input product information;
    b) one or more production systems that produce the product subbatches; and
    c) a plurality of consolidation systems that receive the product subbatches in accordance to consolidation assignment and consolidate the product subbatches into product packages, wherein the computer processing system receives the status information of the consolidation systems and produces consolidation assignment.

12. The automated manufacturing system of claim 11, wherein the computer processing system produces digital data in response to input product information, wherein the digital data was received by the production systems for producing the product subbatches.

13.   The automated manufacturing system of claim 11, wherein the computer processing system assigns the product subbatches to be produced at one of the production systems.

14.   The automated manufacturing system of claim 11, wherein the computer processing system schedules the product subbatches to be produced at one of the production systems in accordance to the status information of the consolidation systems.

15.   The automated manufacturing system of claim 11, further comprising

    d)   a distribution system that receives the product subbatches from the one or more production systems and distributes the product subbatches to the consolidation systems in accordance to the consolidation assignment information.

16.   The automated manufacturing system of claim 11, wherein the product subbatches include machine readable or human readable information comprising consolidation assignment information.

17.   The automated manufacturing system of claim 16, wherein the status of the consolidation systems are tracked by reading the machine readable or human readable information comprising consolidation assignment information.

18.   The automated manufacturing system of claim 11, wherein the status information of the consolidation systems includes the load levels of the consolidation systems.

19.   The automated manufacturing system of claim 18, wherein the computer processing system produces consolidation assignment in accordance to the load levels of the consolidation systems.

20.   The automated manufacturing system of claim 11, wherein the status information of the consolidation systems includes the properties of the product subbatches stored in the consolidation systems.

21.   The automated manufacturing system of claim 20, wherein the status information of the consolidation systems includes the properties of the companion product subbatches of the product subbatches stored in the consolidation systems.

22.   The automated manufacturing system of claim 20, wherein the computer processing system produces consolidation assignment in accordance to the information about the product subbatches stored in the consolidation systems.

23.   The automated manufacturing system of claim 11, wherein a product subbatch includes a plurality of product types.

24.   The automated manufacturing system of claim 11, wherein the product subbatches include one or more of image prints, greeting cards, postcards, calendars, photo snapbooks, and photo albums.

25.   The automated manufacturing system of claim 11, wherein the input information includes digital image data.

26.   A method of automated manufacturing, comprising
       a)   defining product packages and one or more product subbatches within each product package in response to input product information;
       b)   tracking the status of a plurality of consolidation systems to produce consolidation status information;
       c)   producing consolidation assignment in accordance to the consolidation status information;
       d)   distributing product subbatches to the consolidation systems in accordance to the consolidation assignment; and
       e)   consolidating the product subbatches into product packages at the assigned consolidation systems.

27.   The method of automated manufacturing in claim 26 wherein the status of the consolidation systems includes the load levels of the consolidation systems.

28.   The method of automated manufacturing in claim 27 wherein the consolidation assignment is produced in accordance the load levels of the consolidation systems.

29.   The method of automated manufacturing in claim 26 wherein the status of the consolidation systems includes the properties of the product subbatches stored in the consolidation systems.

30.   The method of automated manufacturing in claim 26 wherein the status of the consolidation systems includes the properties of the companion product bathes of the product subbatches stored in the consolidation systems.

31.   The method of automated manufacturing in claim 26 wherein the product subbatches include two or more product types.

32.   The method of automated manufacturing in claim 26, further comprising
        f)   producing a product subbatch at a production system in response to input product information.

33.   The method of automated manufacturing in claim 32, further comprising
        g)   scheduling the product subbatch to be produced at the production system.

34.   A method of automated manufacturing, comprising
        a)   providing or receiving product subbatches and product packages, each product package comprising one or more companion product subbatches;
        b)   providing a plurality of consolidation systems;
        c)   specifying a first load level for at least one of the consolidation systems; and

d)   if the consolidation system exceeds the first load level, sending the consolidation systems only product subbatches that have companion product subbatches already stored in the consolidation system.

35.   A method of automated manufacturing of claim 34, further comprising

e)   if a predetermined number of consolidation systems exceed the first load levels, sending the consolidation systems only product subbatches that have companion product subbatches already stored in the consolidation system.

36.   A method of automated manufacturing of claim 34, further comprising

e)   stopping sending consolidation system product subbatches that do not have companion product subbatches already stored in the consolidation system.

37.   A method of automated manufacturing of claim 34, further comprising

e)   specifying a second load level for the consolidation system wherein the second load level is lower than first load level.

38.   A method of automated manufacturing of claim 37, further comprising

f)   if the consolidation system drops below the second load level, sending the consolidation systems product subbatches that do not have companion product subbatches already stored in the consolidation system.

39.   A method of automated manufacturing of claim 34, further including

e)   consolidating the product subbatches into product packages at the consolidation systems.

40.   A method of automated manufacturing of claim 34, further including

e)   defining product packages and one or more product subbatches within each product package in response to input product information; and

f)   producing product subbatches in response to the definitions of the product packages and associated product subbatches.

41.   A method of automated manufacturing of claim 34, further including

        e)   tracking the status of the consolidation systems to produce consolidation status information, wherein the status of the consolidation systems include at least the load levels of the consolidation systems.

42.   A method of automated manufacturing of claim 41, further including

        e)   producing consolidation assignment according to the status information of the consolidation systems; and

        f)   distributing product subbatches to the consolidation systems in accordance to the consolidation assignment.

43.   A method of automated manufacturing, comprising

        a)   providing or receiving product subbatches and product packages, each product package comprising one or more companion product subbatches;

        b)   providing a plurality of consolidation systems;

        c)   specifying consolidation priority to product subbatches according to the status of their companion product subbatches; and

        d)   sending the product subbatches to the consolidation systems in accordance to the specified priority of the product subbatches, wherein the product subbatches are consolidated into product packages.

44.   A method of automated manufacturing of claim 43, wherein the status of the companion product subbatches includes whether the companion subbatches are stored in consolidation systems.

45.   A method of automated manufacturing of claim 44, wherein the consolidation priority for a product subbatch is raised if one or more companion product subbatches of the product subbatch are already in a consolidation system.

46.   A method of automated manufacturing of claim 44, wherein the consolidation priority for a product subbatch is raised if all the companion product subbatches of the product subbatch are already in a consolidation system.

47.   A method of automated manufacturing of claim 43, further comprising

        e)   determining that one or a predetermined number of consolidation systems exceed a specified load level; and

        f)   sending a product subbatch to consolidation systems only if the product subbatch has one or more companion product subbatches already stored in one of the consolidation systems that exceed the specified load level.

48.   A method of automated manufacturing of claim 43, further including

        e)   tracking the status of the consolidation systems to produce consolidation status information, wherein the status of the consolidation systems include at least the load levels of the consolidation systems.

49.   A method of automated manufacturing of claim 48, further including

        e)   producing consolidation assignment according to the consolidation status information; and

        f)   distributing product subbatches to the consolidation systems in accordance to the consolidation assignment.

50.   A method of automated manufacturing of claim 43, further including

        e)   defining product packages and one or more product subbatches within each product package in response to input product information; and

        f)   producing product subbatches in response to the definitions of the product packages and associated product subbatches.